USER'S MANUAL

Bench scale

CWP

Baxtran

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Disclaimer

We've been tried to provide complete and accurate information in this manual, however, we make no representations and warranties with respect to the contents of this manual, and reserve the right to make change to our products and manual without notice.

1. MAIN DATA

1.1 Signal input range: 0mV ~ 8mV
1.2 Zero point temperature drift ≤ 0.15μV/°C
1.3 Sensitivity temperature drift ≤ 10 ppm/°C
1.4 A/D conversion resolution ration: 500000
1.5 Display resolution ration: 30000
1.6 A/D conversion rate: 168T/S
1.7 Display update rate: 10T/S
1.8 Accuracy class: 3
1.9 Min. Display value: 1/ 2/ 5 available
1.10 Non-linearity error: ≤ 0.01%F·S.
1.11 Baud rate: 600, 1200, 2400, 4800, 9600 (option)
1.12 Load cell excitation voltage: DC5V, drives up to 4 load cells of 350Ω.
1.13 Operation temperature: 0 ~ 40 °C
1.14 Storage temperature: -25°C ~ 55°C
1.15 Relative humidity: ≤ 90% (no condensation)
1.16 Power supply: DC 6V5Ah, free-maintenance storage battery and power adaptor of 9V, 500 mA.
1.17 Working time of storage battery power: ≥ 100 hours
(Fully charged, backlight off and drives only 1 load cell of 350Ω)
1.18 Display style: 6-digit 1-inch 7-segment LCD.
1.19 Dimensions: 300x350 mm, 500x400 mm.
1.20 Peso neto: ≤ 3 Kg

2. MAIN FEATURES

2.1 Indicator enclosure: all stainless steel
2.2 Indicator display angle adjustable (≥ 90°)
2.3 Mount style: table and wall
2.4 IP66
2.5 Two operation modes: weighing and check weighing
2.6 Complete keyboard calibration
2.7 Auto rectifying
2.8 Zero position auto tracking
2.9 Digit filtering
2.10 Full range tare
2.11 Overload indicating
2.12 Three-point (over, accept, under) indicating
2.13 Target-value weight weighing
2.14 Two setup modes of check weighing
a. Weight value input mode
b. Percentage mode
2.15 Unit conversion
2.16 RS-232 output (option)
2.17 Charge and battery voltage indicating
2.18 LED backlight and lighting mode set
2.19 Auto shut-off selecting
2.20 Printing function under normal weighing state

3. STRUCTURE

3.1 Structure diagram

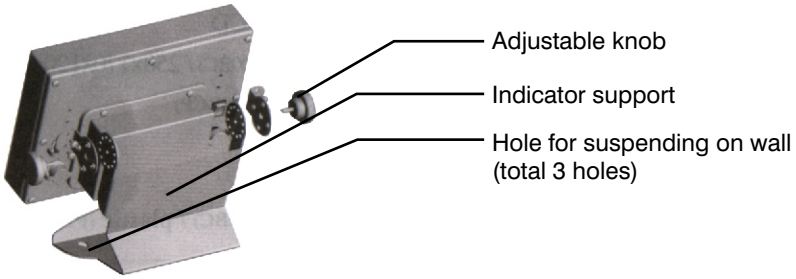


Figure 1-a: Adjustable support

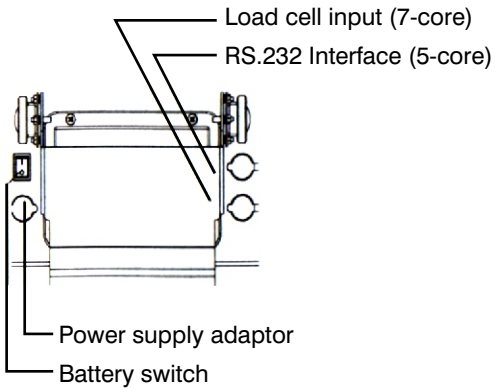


Figure 1-b: Rear view

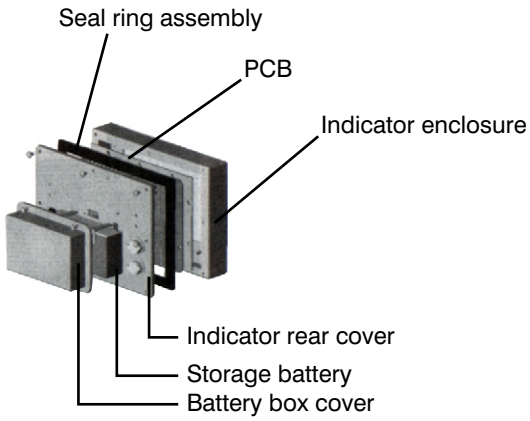
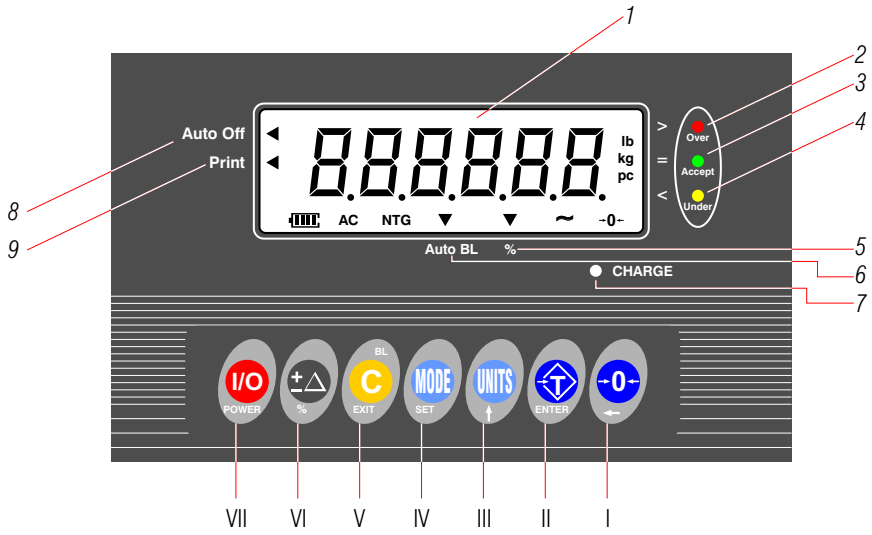


Figure 1-c: Assembly diagram

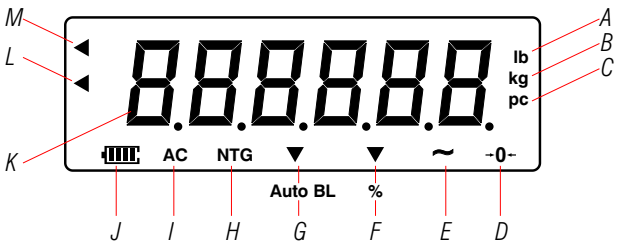
Figure 1: Appearance and structure of the indicator

3.2 Panel



1. LCD screen
2. Red indication light: check weighing mode, the light is on when $W_X \geq W_H$
3. Green indicating light: check weighing mode, the light is on when $W_H > W_X > W_L$
4. Yellow indicationg light: check weighing mode, the light is on when $W_X \leq W_L$
   *Note : W_X refers to the weight of load; W_H refers to high limit value; W_L refers to low limit value. See item 10.3 for details.
5. Percentage unit indicating symbol: when you input the high and low limit value by percentage mode, the triangle cursor appears here.
6. "Auto BL" indicating symbol: When you turn on the auto backlight mode, the tiangle cursor appears here. See item 12.3 for details.
7. "CHARGE" indicating symbol: it is on when the battery is recharging
8. "Auto Off" indicating symbol: When you switch on the auto shut-off function, the triangle cursor appears.
9. "Print" indicating symbol: When you turn on the printing function, the triangle cursor appears.

3.3 LCD screen



A. "lb" weight unit
B. "Kg" weight unit
C. Counting state indicating (optional)
D. Zero positioning indicating
E. Weight stabilization indicating symbol
F. Percentage input switched-on cursor
G. Auto-backlight function switched-on cursor
H. Net weight, tare and gross weight indicating
I. Power adaptor power-on indicating
J. Storage battery power-on and its voltage indicating
K. 1-inch, 7-segment (containing decimal point) digital character (6-digit)
L. Printing function switched on cursor
M. Auto shuft-off function switched-on cursor

3.4 Electrical connection

3.4.1 Power supply is provide with standard adaptor.

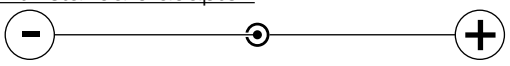


Figure 4-a: Power adaptor unit

3.4.2 Load cell input

The load cell input socket installed on the back of the indicator. The wire connection description as follow:

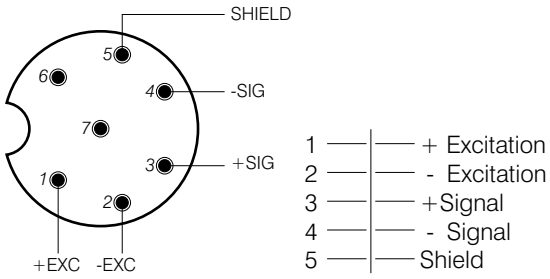


Figure 4-b: Connection

4. OPERATION KEYS INSTRUCTION

I. Zero and place-shifting key

Under weighing state, when the displayed weight is not more than 2% of Max Capacity, you can use this key to make the display return to zero (the repeat zero range can't be more than 4% of the Max Capacity). When this key is pressed, " → 0 ← " cursor on the LCD screen will appear.
Under calibrating state, this key is used for selecting digit place. When this key is pressed, the selected digit will move to the left one and flash at the same time.

II. Tare and confirmation key

Under weighing state, when the weight loaded on the scale platform is not more than Max. Capacity plus 9e ("e" refers to division value), you can make display return to zero by pressing this key, and the cursor on the screen will change from "G" to "N". At this time if tou remove the goods from the scale platform, the screen displays a negative value. Press this key again, the display returns to zero and the cursor "N" returns to "G".
Under calibrating and setting states, this key is used to confirm the current operation and to remind you proceed the next step.

III. Unit converting and digit increment key

Under weighing state according to F1.1, if you press this key once, the weight unit will convert between "kg" and "lb". Under calibrating and setting state, if you press this key, you can make the selected digit change in the sequence of "0 → 1 → 2 ... 9 → 0".

IV. Mode key

You can convert weighing modes between "basic weighing" and "check weighing" by pressing this key. While calibrating and rectifying, you also need to use this key.

V. Clear key

Under weighing state, you can change the backlight status via this key.
In check weighing mode, it si used for clearing the previous value in storage. In addition, you can press this key to withdraw from calibrating and rectifying states.

VI. Printing and value difference key.

1. In check weighing mode, you can press this key to change the displayed content and make the display convert between value difference and normal value.
   While setting the high and low limit under check weighing state, you can select percentage setup mode via this key, and at the same time the triangle cursor of "%" indicating symbol will appear.
2. Under weighing state when F1.5=0, the indicator will output serial printing signal after pressing this key.

VII. I/O key.

This key is used for turning on or turning off power supply, and it has other functions while calibrating.

5. DIGIT INPUT

While processing the operation of item 10.3, 10.4 in this manual or calibrating, you need to input the digit. The digit input is all fulfilled via UNITS ↑ and -0- ← in cooperating. -0- ← refers to place-shifting key, it is used for selecting digit place and the selected digit place will flash. At this time if you press UNITS ↑ , the selected falshing digit will change in "0 → 1 → 2 ... 9 → 0".

For example: to input a group of digit 2345.

Step 1: Press C (C), the indicator display X00000

* **Note**: While inputing the digit, first press C (C) to make the indicator display 0 and then input the digit. It is possible that "X" refers to " □ ", "H", "L" or "E" indicating symbol. And "0" refers to the flashing place.

Step 2: Press UNITS ↑ 5 times, X00005 is displayed

Step 3: Press -0- ← one, X00005 is displayed

Step 4: Press UNITS ↑ 4 times, X00045 is displayed

Step 5: Press -0- ← one, X00045 is displayed

Step 6: Press UNITS ↑ 3 times, X00345 is displayed

Step 7: Press -0- ← once, X00345 is displayed

Step 8: Press UNITS ↑ twice, X02345 is displayed

Step 9: Press → (ENTER) to confirm and enter the next step.

* **Note:** Under some special states, you may press [EXIT] to withdraw.

Thus a group of digit input is finished.

6. OUTPUT AND PRINTING RS-232

6.1 Serial output.

6.1.1 The 5-core metal socket (figure 5) is used for Rs232 hardware interface, the socket is mounted on back of the indicator.

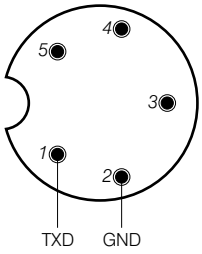


Figure 5: interface of serial signal output

6.1.2 The serial data (ASCII code) is transmitted in continuous mode by MCS-51 way 1. Every group of data has 17 frames including 1 frame of start character (02), 3 frames of state mark, 6 frames of data displaying, 6 frames of tare data and 1 frame of enter, as follows:

STX	State A	State B	State C	Displayed value	Tare value	Enter

STX: start character, 02H

State A: Control character for decimal point (D7 refers to verification bit)

	D7	D6	D5	D4	D3	D2	D1	D0	Decimal point place	
Verification bit	0	1	0	1	0	1	0	Without decimal point		
	0	1	0	1	0	1	1	1-digit decimal	0.0
	0	1	0	1	1	0	0	2-digit decimal	0.00
	0	1	0	1	1	0	1	3-digit decimal	0.000
	0	1	0	1	1	1	0	4-digit decimal	0.0000

State B: comprehensive control character.

D7	verification bit		
D6	0		
D5	1		
D4	1		
D3	Dynamic mark bit	D3=0, stability;	D3=1, non-stability (dynamic)
D2	Overload mark bit	D2=0, normality;	D2=1, overload
D1	Positive and negative mark bit	D1=0, positive number;	D1=1, negative number
D0	Gross weight and net weight mark bit	D0=0, gross weight;	D0=1, net weight

State C: output space character

6.1.3 Every frame consists of 10 digits. The first is start bit, "0". The ninth is stop bit, "1".
One of the other eight is correction bit and the other seven are all data bits (from low to high), the format is as follows

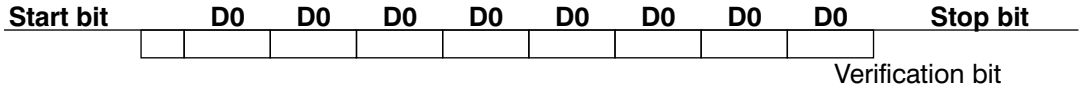


Figure 6: Frame format

6.2 Ticket printing output

6.2.1 Option of the indicator data

This indicator can be matched to EPSON TM-U295 micro-printer. In order to match to the printer, set F1.5=0, and set F1.3 consistent to the printer. At this moment, if you press [P] key, the printer will print the ticket as the following format:

No. 03
G=1.576 lb
T= 0.948 lb
N= 0.628 lb

When the weight unit is lb.

No. 04
G=0.714 kg
T= 0.429 kg
N= 0.285 kg

When the weight unit is kg.

Figure 7: Ticket printing format

6.2.2 Connection between the indicator and printer.

If there is one cable provided together with the printer, connect one end of the cable to the printer interface and the other end to the 5-core metal socket of the indicator as following:

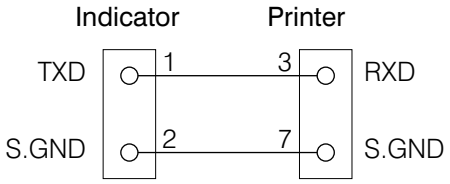


Figure 8

*** Note:** The printer will not print if the net weight is a negative value.
The print number varies from 0~99. When it exceeds 99, it will back to 0 automatically.

7. POWER-ON OPERATION

Insert power adaptor or turn on the battery switch and press (I/O) to turn on the indicator. After the indicator is turned on, it will first display [8C] and then the version number, then it will check the strokes from "9" to "0" successively. If its connection is correct and zero position is normal, the indicator will display [0] . You should check the scale body if the indicator gives out a warning sound and displays [HHHHHH] or [LLLLLL], and then [-XXXXX] after. Under power-on state, press (I/O) to turn it off. To change the battery, see item 14.4 for details.

***Note:** The indicator will automatically enter basic weighing mode after power on.

8. TWO WEIGHING MODES SWITCHING

You can convert between "basic weighing" and "check weighing" by pressing (MODE) key.

9. BASIC WEIGHING MODE

After power on, the scale will automatically enter basic weighing mode. Under this mode, the scale has such basic functions as "ZERO", "TARE", "Weight unit converting", "Arbitrary-point auto rectifying", "overload indicating" and so on.

10. SETUP IN CHECK WEIGHING MODE

10.1 Entering setup.

No matter whether it is in "basic weighing mode" or "check weighing mode", you can make it to high and low limit value setting process via operating keyboard. The method is as follows: Press (MODE) and (±Δ) simultaneously (you may also observe the former target value, high and low limit value and percentage value in storage by using this method), at this time the indicator display [XXXXX] (XXXXX refers to the previous target weight value in storage). If you do not need to amend it, press (ENTER) to confirm, then go on to the next step. If need to revise, press (C) to make [XXXXX] turn to [00000]. At this time, process sampling for target weight.

Figure 9

10.2 Target weight input.

Load the target weight on platform, press (ENTER) or (EXIT) to confirm after weighing stabilisation. While pressing (ENTER), it means you still neet to go on to the next setup for the high and low limit value. At this time the indicator displays [HXXXXX] (XXXXX refers to the high limit value in storage). While pressing (EXIT), you can withdraw from setup state, at this time it returns to check weighing mode.
***Prompt**: If you only need to change the target value and need not to amend the high and low limit value, you should press (EXIT) to confirm and withdraw, at this time the high and low limit value is based on the percentage value.

10.3 Input of high and low limit value in digit mode.

After the indicator displays [HXXXXX], if you need to amend it, you should first press (C) to clear and make it display [H00000] ("0" at the last right flashes), then input the high limit weight data via ↑ and ← key in cooperating and then press (ENTER) to confirm. If you do not need to amend the former value, you may directly press (ENTER) to confirm.
When the indicator displays [LXXXXX] ("XXXXX" refers to the low limit value in storage), under simirlar circumstances, if you need to amend it, you can first press (C) to clear and then input the digit, and then press (ENTER) to confirm. If you do not need to amend it, directly press (ENTER). After the low limit value confirming is finished, the indicator automatically enters "check weighing display mode" and display the value between the load on the platform and the set target weight.

10.4 Input of high and low limit value in percentage mode

10.4.1 After the target weight setup is finished and the indicator displays [HXXXXX], and if the item 10.4.2 can be met (i.e. the absolute value of the value difference between high limit value and target value is equal to that of the value difference between low limit value and target value), you may input the high and low limit value in percentage mode. The method is as follows: Press (±Δ) once, the indicator displays [HL-XXX] ("XX.X" refers to the previous percentage value in storage) is displayed, at the same time the triangle cursor used for indicating "%" appears. If you need to amend it, press firstly (C) to clear the previous value and make it display [HL-00.0] , then input the percentage value by pressing ↑ and ← key in cooperating, and then press (ENTER) to confirm. If do not need to amend, directly press (ENTER) to confirm, it enters check weighing mode.

10.4.2 Only when the value difference between the high or low limit value and the target value meets the following condiction, you can confirm the high and low value through percentage input style.

$$W_0 - W_L = W_H - W_0$$

"W_0" refers to target weight; "W_H" refers to high limit value; "W_L" refers to low limit value;.

$$\text{Percentage value} = (W_0 - W_L) / W_0 \times 100 \quad \text{or} \quad (W_H - W_0) / W_0 \times 100$$

For instance: target weight W_0=30kg; low limit value W_L=29,7kg; high limit value W_H=30,3kg.
Because of 30-29,7=30,3-30, you can input the high and low limit value via percentage mode. And at this time the percentage value to be inputted is "1.0".

Figure 10: Percentage input

Note: Be sure to retain a digit behind decimal point.

11. DISPLAY IN CHECK WEIGHING MODE

11.1 Value difference display.

"value difference display" means the indicator will display the value difference between the weight value of loaded goods and the target value. Meanwhile, while the goods weights is "0", the indicator will display a negative value and its absolute value is the set target weight. Of course, when the weight of goods is equal to the target value, the indicator will display "0".

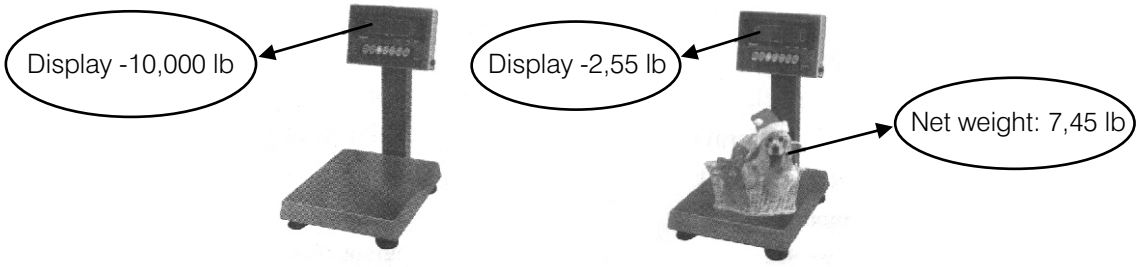


Figure 11: Value difference display mode

Note: Under value difference display mode, "ZERO" and "TARE" functions will not be responded.

11.2. Normal display.

"Normal display" means the indicator will display the weight value of loaded goods.

11.3. Two displays modes shift.

After entering check weighing status, the indicator will automatically enter value difference display. However, you can convert its display between "value difference display" and "normal display" by pressing (±Δ) key, and press (±Δ) once, the display will be converted once. It can reserve the shift mode, unless the power supply is cut off.

11.4. Three-point Over-Accept-Under display

Under check weighing state, you can check up the area which the weight value is in according to 3 LED indicating lights at the right side of the indicator.
When the weight of load (W_X) is between the high limit value (W_H) and the low limit value (W_L) , i.e. when $W_H > W_X > W_L$, the green "ACCEPT" indicating light is on.
When the weight of load (W_X) is equal to or less than low limit value (W_H), i.e. $W_X \geq W_H$, the red "OVER" indicating light is on.
When the weight of load (W_X) is equal to or less than the low limit value, i.e. $W_X \leq W_L$, the yellow "UNDER" indicating light is on.
Note: only in check weighing mode, one of three Over-Accept-Under indicating lights will be on.

12. BACKLIGHT SELECTING

The indicator is equipped with LED backlight function, which ensures the normal operation it in insufficient sunlight condition. For usage life of the storage battery, it has 2 modes. It is set in constant-off state under manual mode when it leaves our company.

12.1 AUTO Mode

While auto mode is selected, "Auto BL" indicating cursor is on. At this time if there is any load on scale platform or you operate the keyboard, the backlight is automatically on for 10 seconds and then off.

12.2 MANUAL Mode

While manual mode is selected, "Auto BL" indicating cursor is off. At this time, if its backlight off, press (C) key to turn it on. If backlight is on, the backlight will enter auto mode after pressing (C).

12.3 Backlight mode shift

Press (C) once, the backlight state will be converted once, the conversion sequence of this state is as follows:

CONSTANT OFF ⟶ CONSTANT ON ⟶ AUTO ⟶ CONSTANT OFF

After power supply is cut off, the state will not be reserved.

13. AUTO RECTIFYING

Due to the factors as transportation, being used for a long time, maintenance, etc., maybe it will lose its accuracy. For returning to its accuracy quickly, it is set with auto rectifying function.

13.1 Before rectifying, be sure there is no load on scale platform.
If "0" is not presented, you must turn on it again and make it display 0.

13.2 Press (0) and (MODE) simultaneously, the indicator will display E00000. At this time, place a test weight (or substitute) on scale platform. Because the division value and Max. capacity are known, the decimal point place need not to be considered. So, at this time only need to input the data equal to the known weight by pressing ↑ and ← in cooperating. Then press (ENTER) key to confirm after the stabilization cursor "~" is on. Thus the rectifying is finished, and the indicator returns to zero after the test weight is removed.
***Note**: the test weights or replacement goods used for rectifying must be more than 60% of Max. Capacity so as to acquire a better rectifying result.

14. STORAGE BATTERY MAINTAINING

14.1 The storage battery capacity is indicated via its indicating symbol " " on the LCD screen. There are 4 spaces on the symbol. When the symbol show 4 spaces, wich means its voltage is more than 6.8V. When the symbol indicates only 1 space, which means its voltage is less than 5.5V. When there is no space left on the symbol, at this time its voltage is less than 5.3V.

14.2 When there is only 1 space left on the symbol, maybe the ouput of the storage battery is weak for normal operation, at this time please charge the storage battery. The indicator can be operated while being charged. If battery is not been charged in time and the scale continues to be operated, when its voltage is less than 5.3V, the scale will automatically stop working within 1 minute.

14.3 If the scale is not used for a long time, be sure that the storage battery is in power-off status.

14.4 If the working time is rather short than it is fully charged, you should consider to charge the storage battery. Opening the battery box cover, pulling up the positive and negative metal pieces and removing the storage battery. While changing the battery, be careful to make sure the electrocode of the storage battery is correct.

14.5 Battery switch (see figure 1-b): if you want to charge the battery or use with DC power, please turn on the battery. If you don't want to use it for a long time or in transportation, please turn it off.

14.6 About recharging: there are three colors of recharging light to indicate different meanings, red means the battery needs continuous recharging, yellow means the voltage is 70% full and green means the voltage is 100% full.

15. USE GUIDE

15.1 Please use the battery correctly according to the instruction in the manual.
15.2 When the load (including tare) being weighed exceeds Max. Capacity plus 9e. ("e" refers to Division), the indicator displays FULL.
15.3 You can wash down indicator with water, but don't wash it with high corrosive solvent.
15.4 Be sure that the ground terminal of AC power is properly grownded.
15.5 Don't disassemble it without authorisation.
15.6 Turn off power supply and pull out its power plug at once if it is out of order in use. Non-professional personnel can't repair it without authorisation, contact our sales agent in your area.
15.7 If you need to re-calibrate the indicator, do it after the indicator is warm up for 30 minutes..

Forbid changing the data of the scale unless permitted by law.

16. DATA SETTING AND CALIBRATING

In order to convenient for function's amendment, indicator is set 3 main directories on the modification interface. The following are the description of 3 main directories:

F1: Function management
F2: Circumstance factor adjustment
F3: Calibration

16.1 Entering main directories

Under power on state, firstly press (I/O) to turn it off then press (I/O) to turn it on again. During the indicator is self-checking "7" - "0", press (I/O) (notice: you must press (I/O) before the self-inspection is finished), at this time the indicator will display SEt UP, then press (0) to make it display F1.
Under turn-off state, process the operation mentioned above after it warm up for 30 minutes.
When pressing (UNITS) successivly, the indicator will select the main directories in F1-F2-F3-F1 sequence.
When pressing (ENTER), the indicator will enter subdirectory or confirm the selection of the subdirectory.
When pressing (EXIT) the indicator will back to main directory from subdirectory and return to the self-checking state.

16.2 Entering subdirectories and selecting

When the indicator displays "F1" or "F2" or "F3", you can make it enter subdirectories by pressing (ENTER). And you can choose the subdirectories by pressing (UNITS).

16.2.1. Subdirectorios y contenido en F1

F1.1: Unit selecting, with 4 options
- F1.1=1 only for choosing "kg" unit.
- F1.1=2 "kg" and "lb" unit choosing and converting, when turn-on, its unit is "kg" and can be calibrated only under "kg" unit.
- F1.1=3 "kg" and "lb" unit choosing and converting, when turn-on, its unit is "lb" and can be calibrated only under "lb" unit.
- F1.1=4 only for choosing "lb" unit.

F1.2: Calibration mode selecting, with 3 options
- F1.2=1 fixed point calibrating and selecting internal preset Max. capacity.
- F1.2=2 arbitrary point calibrating and selecting internal preset Max. capacity.
- F1.2=3 arbitrary point calibrating and selecting Max. capacity.

F1.3. Baud rate selecting, with total 5 options
- F1.3=1 B=600
- F1.3=2 B=1200
- F1.3=3 B=2400
- F1.3=4 B=4800
- F1.3=5 B=9600

F.1.4 Auto shut-off function, with 3 options.
- F1.4=0 auto shut-off function off
- F1.4=3 auto shut-off in 3 minutes after operation stopped
- F1.4=5 auto shut-off in 5 minutes after operation stopped

When the version is less than REV2.0, you can only choose F1.2=3

F1.5 Serial output mode, with 2 options
- F1.5=0 printing output (printer model: TM-U295)
- F1.5=1 serial output.

F1.6.Selecting setup value from F1.1 to F1.5, with 2 options.
- F1.6 selection of setup value of the users
- F1.6 selection of default value, refer to the following table

F1.1	F1.2	F1.3	F1.4	F1.5
1	3	2	1	1

*Notice: After the option of F1.6 is finished and if you press (ENTER) to confirm, at this time the indicator will display F2 again to enter next main directory.
When pressing , you can re-select main directories. When pressing (EXIT), you will exit from the main directory.

16.2.2 Subdirectories and contend about F2.

F2.1 Turn-on zero range selecting, with 4 options
- F2.1=0 auto turn-on zero function off.
- F2.1=5 turn-on zero range of 5 % F·S
- F2.1=10 turn-on zero range of 10 % F·S
- F2.1=20 turn-on zero range of 20 % F·S

F2.2 Auto zero tracking range selecting, with 5 options
- F2.2=0.0 no zero tracking.
- F2.2=0.2 auto zero tracking of 0.2e
- F2.2=0.5 auto zero tracking of 0.5e
- F2.2=1.0 auto zero tracking of 1.0e
- F2.2=2.0 auto zero tracking of 2.0e
- F2.2=3.0 auto zero tracking of 3.0e

F2.3 Digital filtering coefficient selecting, with 3 options

F2.3=1 low-degree filtering: suitable for the conditions with weak air flow or little atmospheric pressure charge.

F2.3=2 medium-degree filtering: suitable for general occasion.

F2.3=3 high-degree filtering: suitable for the situations with strong air flow or large atmospheric pressure change.

F2.4 Extension display mode (i.e. Internal graduation number display), with 2 options

F2.4=0 which means prohibiting extension display

F2.4=1 which means allowing extension display

Note: "extension display" refers to internal resolution ration display, you can use this method conveniently to adjust and view the error.

F2.5: selecting for setup value from F2.1 to F2.4, with 2 options

F2.5=1 selection of setup value of the users.

F2.5=2 selection of default value, refer to the following table for the data

F2.1	F2.2	F2.3	F2.4
20	0.5	2	0

16.2.3 Subdirectories and contend about F3

F3 is used for calibrating

16.3 Calibration

16.3.1 When the indicator displays [F3], press (ENTER) key to enter calibrating state. After entering, the indicator will firstly display [d----1], which indicates Min. Display value. There are 3 options for the Min. Display value, and the value is separately 1, 2 and 5. You can select Min display value via ↑, and then press (ENTER) to confirm.

> If the version number is less than REV2.0, then the Max Capacity must be through digit keys.

The steps are as following:

1. Digit input
   a. When the Min. Display value is confirmed, the indicator will display [U A4 A3 A2 A1 A0], A4 A3 A2 A1 A0 is the last Max. Capacity. If you want to change it, just press ←0 key to make it zero, that's [U00000] . And the decimal point disappers.
   b. Input the values you need with methods interpreted in item 5.

2. Decimal point input.
   a. Press (I/O) and (ENTER) to make the decimal point stay at the right but one, that's [U B4 B3 B2 B1 B0] B4 B3 B2 B1 B0 is the last input value.
   b. Press ←0 key to make the decimal point stay in the position as you need.

> If the version number is less than REV2.0, the Max Capacity can be pre-setted.

After confirmed, the indicator will display [5]. The value display represents Max. Weighing capacity, and there are 13 options for Max. capacity, reparately: 6kg (12lb), 15kg (30lb), 30kg (60lb), 60kg (120lb) 150kg (300lb), 300kg (600lb), 600kg (1200lb), 1000kg (2000lb), 1500kg (3000lb), 2000kg (4000lb), 3000kg (6000lb), 5000kg (1000lb), 10000kg (20000lb).
You can select Max. xeighing capacity as you need by pressing ↑.

Notice: The scale (indicator) is able to comprehend graduation number automatically through the Min. display value and Max. capacity you select. And the graduation number range to be comprehened is always within 2000～15000.

For example:
When the Min. display value selected is 1 and the Max. capacity selected is 60kg, the graduation number to be accepted is 6000, neither 600 nor 60000. And when the Min. display value and the Max. capacity you selected is separately 1 and 1000 kg, the graduation number to be accepted is 10000, neither 1000 nor 100000.

16.3.2 After you press (ENTER) to confirm the Max. capacity, the indicator displays CAL 09 and carry through countdown, at this time it automatically confirm zero position.

16.3.3 After finishing the countdown, it will display CAL-00 . After confirmation by pressing (ENTER) key, the display of the indicator has 2 possibilities.
a. When F1.2=1, wich means the case your selection is fixed point calibration, at this time the indicator displays a weight data. See the following table for the relation between the weight data for rectifying and the Max. Capacity.

Max. Capacity (kg/lb)	6 /12	15 /20	30 /60	60 /120	150 /300	300 /600	600 /1200	1000 /2000	1500 /3000	2000 /4000	3000 /6000	5000 /10000	10000 /20000
Rectifying Value (kg/lb)	5 /10	10 /20	20/50		100/200		200/500		600/1200		1000/2000		3000 /5000

At this moment you can load test weights (or substitute) on the platform and press (ENTER), the indicator will display Add-09 and then carry through countdown. After the countdown is finished, the whole calibration is finished, at this time the indicator displays F3 . You can exit by pressing (EXIT).

b. When F1.2=2 or F1.2=3 (which means the case your selection is arbitrary point calibration), the indicator displays CAL-SP. Under this state, you can load the test weights (or substitute) on the platform (generally the weight loaded should be more than 60% Max. capacity to increase linearity), and press ← to make it display E00000 , the decimal point will appear in the corresponding position and the last "0" will flash. Input the data equal to loaded weight through cooperative use of ↑ and ← as interpreted in item 5 and press (ENTER) to confirm. The indicator will display Add-09 and countdown. When the countdown is finished, it indicates the calibration is over and the indicator displays F3 . Press (EXIT) to exit from calibrating state and make the indicator self-check. After self-check, the indicator will back to normal weighing state.

When the version number is less than REV2.0, you can only choose arbitrary point calibration.

16.5 Logic flow chart for setting and calibrating

Figure 12a
Enter calibrating state, select main directory and subdirectory by ↑

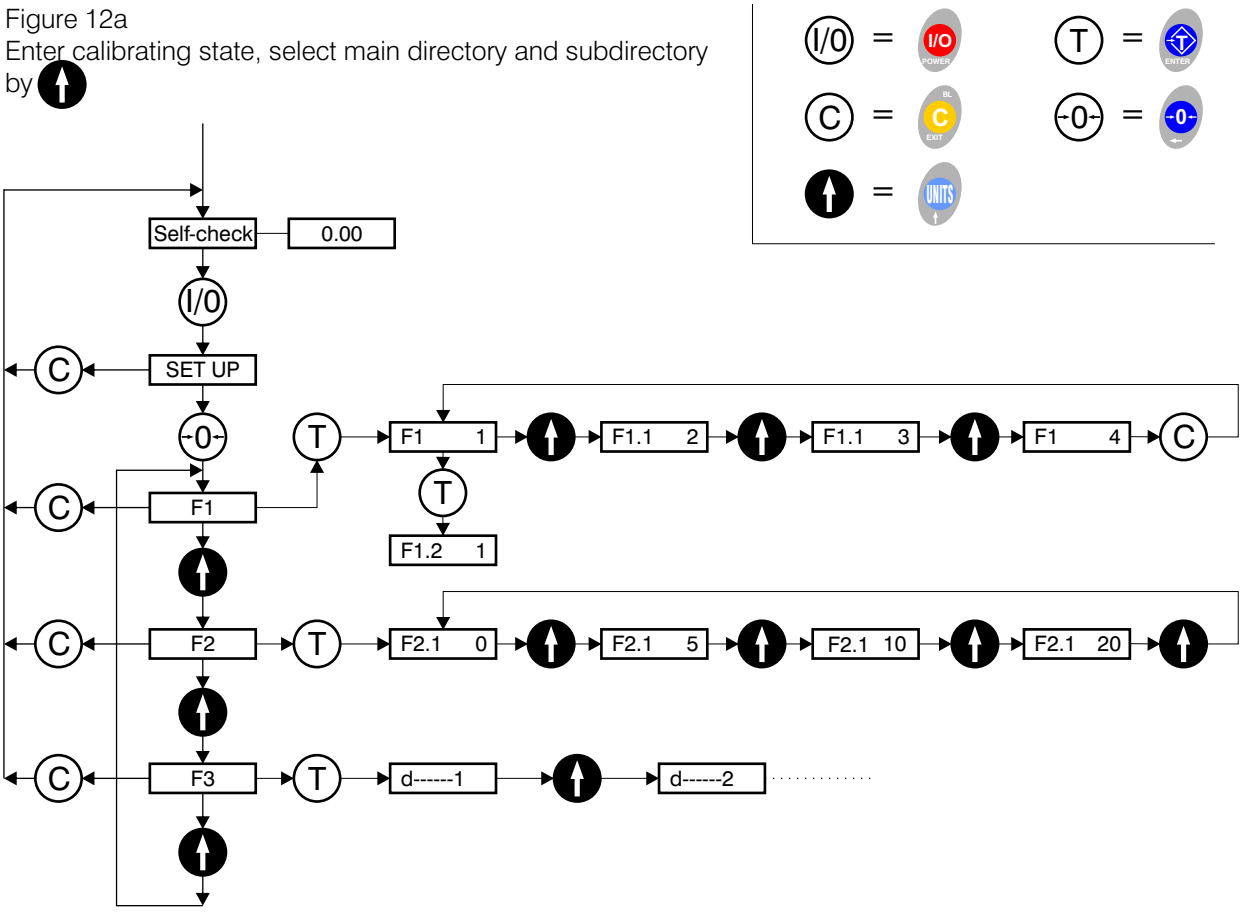


Figure 12b: Press T to enter subdirectory and enter next main directory by confirming the last subdirectory.

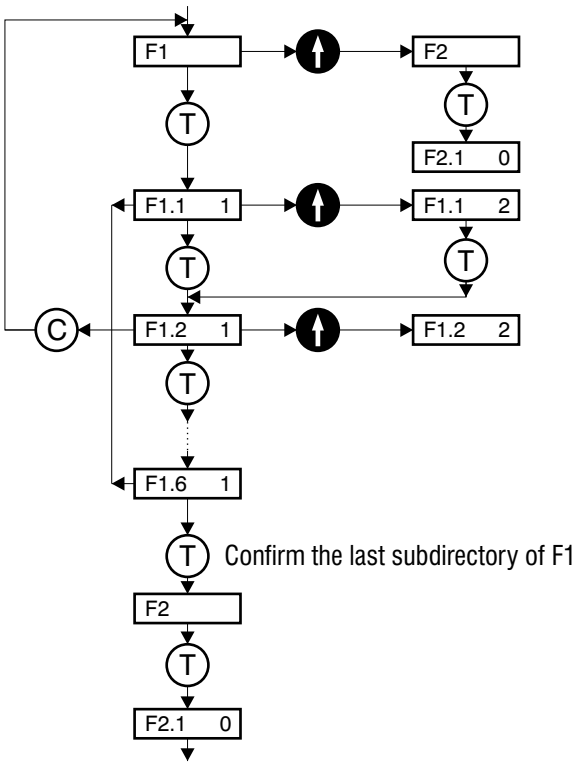


Figure 12c
Exit from subdirectory to main directory by C

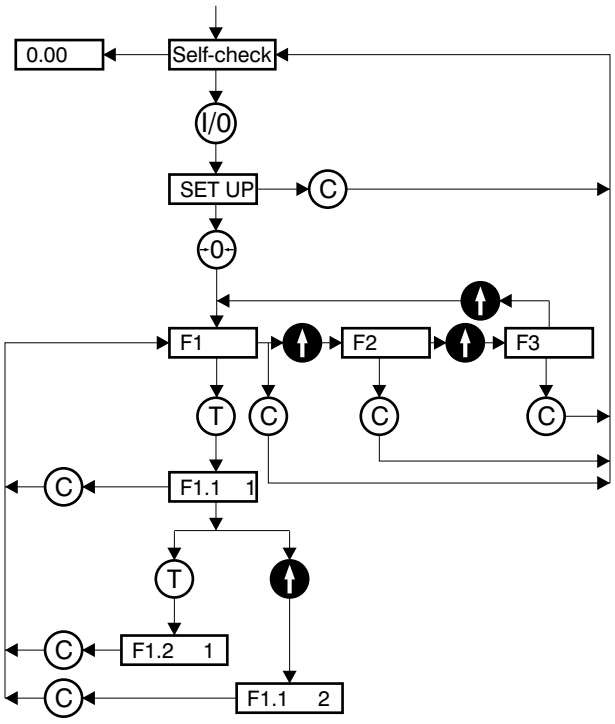
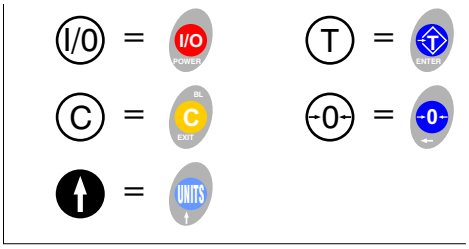
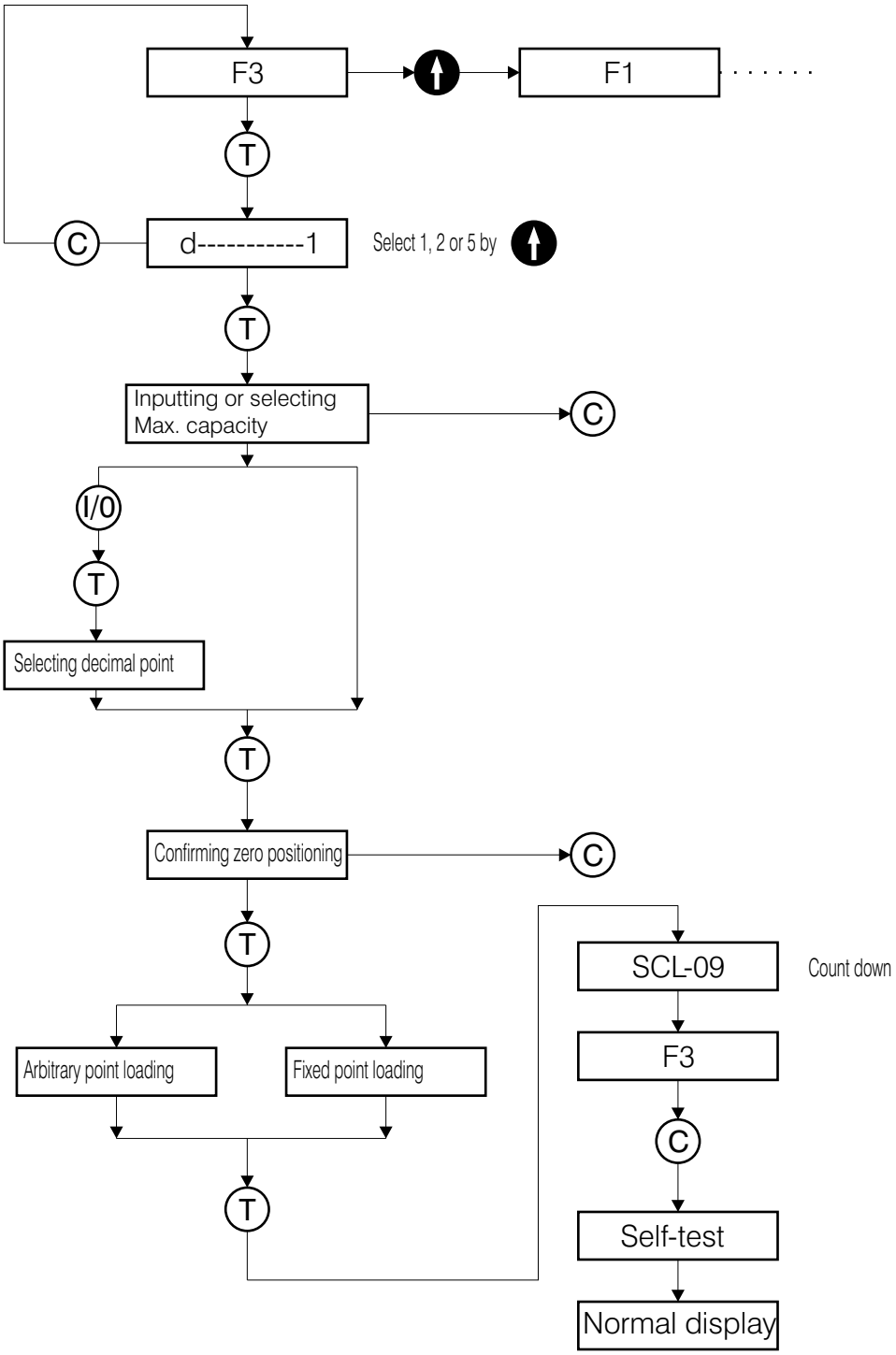


Figure 12d
Calibrating flow chart





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